

# CLT Dolly Set System



**T**he CLT Dolly Set is a self-loading transport system designed specifically for Military Tactical ISO Shelters. The CLT Dolly Set includes all of the inherent capabilities of the 25-Ton Container Load Trailer (CLT) system, but configured for the lighter weight application associated with tactical shelters. The CLT Dolly Set is actually a variant of the US Military Standard M1022-A1 Dolly Set

Mobilizer customized to meet individual customer requirements.

The CLT Dolly Set is most useful when used as a shelter handling device (for lifting, handling, truck or aircraft loading), and as a shelter transport device (for highway or rough terrain travel). The self-loading Dolly Set can be used to lift and load ISO Containers or Shelters, transport them over the road or on rough terrain, and unload and position

them at their final destination. It facilitates the intermodal transport of ISO Shelters and containers in forward operating areas where more expensive assets such as cranes, forklifts, container handlers, hooklift systems, trailers, and K-Loaders may not be available.

The Dolly Set is also capable of roll-on/roll-off loading of 8-ft. or 8.5-ft. tall ISO shelters and Containers to/from C130 aircraft. Up to two shelters can

be loaded per aircraft with the auxiliary C130 Loading Kit.

Each CLT Dolly Set system consists of a front steerable dolly and a rear trailer dolly along with interconnecting brake and electrical lines to connect to the tow vehicle. After connection to each end of a shelter by means of four twist-lock bolts, the Dolly Set raises the shelter to ride height in just a few seconds with its on-board diesel-powered hydraulic system. The system can be towed at highway speeds up to 90 kph (55 mph) or on rough terrain at reduced speeds. When not connected to a shelter, the dolly set can be coupled together as a 4-wheel trailer (in tandem if desired) for transport by road, rail, ship or air.

The CLT Dolly Set includes a 6.2 hp diesel engine powered hydraulic system with four cylinders on each half to provide the power required for all connection and lift sequences. The unique patented design also provides for a balanced 3-Wheel handling position for each dolly for ease of unloaded movement and positioning.

The CLT Dolly Set has been customized to meet specific



*Dolly Set in 4-Wheel Mode (Unloaded)*



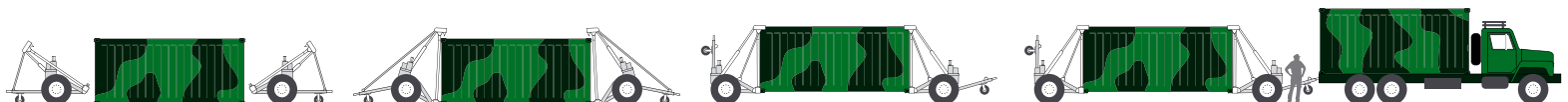
*M1022-A1 Dolly Set Loading Shelter onto C130 Aircraft*



*M1022-A1 Dolly Set with Optional Side Lift Kit Installed.*



*Dolly Set being Maneuvered in 3-Wheel*



# CLT Dolly Set System Data Sheet



Rear Dolly Permits Full Opening of 3-4 ft Wide Access Doors.



Dolly Set Loaded into C130 Aircraft with 8-ft. x 20ft ISO Container.



road regulations in a number of countries. The standard system has been certified for UK and EU requirements.

## Tests & Certification

Prior to fielding, the original CLT Dolly Set design (designated M1022-A1 by the US Military) was operationally tested by the US Army. A total of 20,000 km (12,000 miles) of testing was performed on two dolly sets over paved highways, gravel roads, cross country terrain, Belgian Block and Vibration courses, and both longitudinal inclines (30% grade) and side slopes (20% grade). The CLT Dolly Set passed all US

Army operational, reliability and maintainability requirements, and the first of more than 800 systems was fielded in 1996.

The dolly set was also successfully operated in a cold chamber at temperatures down to -25F (-32C) unaided, and at temperatures down to -50F (-46C) with the assistance of an auxiliary cold start kit.

Additional product upgrades (S-280 Shelter Adapters, engine covers) and auxiliary systems (C130 Loading Kits, Complexing Dollies) are also available and are detailed in separate publications. ■

## Leading Particulars:

Designation	CLT Dolly Set
Weight (Empty)	2,795 kg (6,150 lbs) Standard 3,455 kg (7,600 lbs) w/Side Lift Kit Installed
Lift Capacity (Container Weight)	9,090 kg (20,000 lbs)
Transport Capacity	6,818 kg @ 90 kph (15,000 lbs @ 55 mph) 9,090 kg @ 83 kph (20,000 lbs @ 50 mph)
Max. Lift Height	1.27 m (50 in) Standard 1.57 m (62 in) with Side Lift Kit
Width	2.44 m (96 in)
Length (with 20 ft shelter)	11 m (36 ft)
Height	Adjustable
Ground Clearance (typical)	35.5 cm (14 in)
Diesel Engine	6.2 hp Kubota, One Cylinder, Electric Start
Hydraulic Pump	2 GPM Gear Pump, 2,000 psi Pressure
Lift Cylinders	4 ea: 3.5 in. Bore, 51.75 in. Stroke
Positioning Cylinders	4 ea: 1.5 in. Bore, 48 in. Stroke
Tires	12R x 22.5
Suspension	Air Spring—Max 1.5 hz Undamped Ride Frequency
Brakes	4-wheel Full Air Wedge Type (ABS Optional)
Fenders/Mudguards	Optional
Towbar Lunette Eye	MS 51336
Air Line Connectors	MS35746 Compatible
Electrical system	12V with 24V Adaptation
Electrical Connectors	12-Pin NATO MS75021-1 (& 7-Pin SAE J560)
Sling/Tiedown Provisions	MIL-STD-209
Corrosion Treatment & Paint	Galvanized w/CARC Finish per MIL-C-46168
Patent No.	5,006,031



6,2 Hp Diesel Engine

